

Application No.: 10/718,896

Docket No.: JCLA11793

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed on May 4, 2007. The Office Action has rejected claims 13-17, 25-34 and 26-43 under 35 U.S.C. § 102(b) as being anticipated by Rajeevakumar (USP 5,426,324; hereinafter Rajeevakumar).

Upon entry of the amendments, Claims 13-17, 25-34 and 26-43 remain pending. More specifically, Claims 13, 15, 25, 27, 37-38 have been amended. It is believed that no new matter is added by way of these amendments made to the claims or otherwise to the application.

After carefully considering the remarks set forth in this Office Action and the cited references, Applicants respectfully submitted that the presently pending claims are already in condition for allowance. Reconsideration and withdrawal of the Examiner's rejection are requested.

Claim Rejections-35 USC §102

The Office Action rejected claims 13-17, 25-34, 36-43 under 35 U.S.C. 102(b) as being anticipated by Rajeevakumar (US Patent 5,426,324).

In order to properly anticipate Applicants' claimed invention under 35 U.S.C 102, each and every element of claim in issue must be found, "either expressly or inherently described, in a single prior art reference". "The identical invention must be shown in as complete details as is contained in the claim. Richardson v. Suzuki Motor Co., 868 F. 2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." See M.P.E.P. 2131, 8th ed., 2001.

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Applicants respectfully submit to the office that the reference fails to render claims 13-17, 25-34, 36-43 of the invention anticipated for at least the reasons that not each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference.

The present invention teaches that a capacitor dielectric layer is formed on the surface of the substrate 200 around the trench 210, and the capacitor dielectric layer continuously extends from the inside of the trench to an upper surface of the substrate. Rajeevakumar, on the other hand, teaches first forming a dielectric 10 inside the trench and then filling the trench with poly, wherein the dielectric can be oxide, silicon nitride or a composite of the two. Rajeevakumar continues to teach that the upper portion of the poly and the dielectric 10 inside the trench is etched and an oxide is deposited to form collar 31 on the upper surface of the trench. The hole is then filled with poly again (see col. 3, line 65 bridging to col. 4, lines 19, Figures 5-6). Hence, the capacitor dielectric of Rajeevakumar can not be construed as a continuous layer because the dielectric 10 and the collar 31 are formed in different steps and can be of different materials. The present invention specifically teaches in claims 13, 25 and 37 forming the capacitor dielectric layer in the trench in a single process step with a same type of material, which is an oxide/nitride stacked layer.

Additionally, the conducting structure of the present invention electrically connects with the protruding electrode by contacting solely with the upper surface of said protruding electrode, while the side of the protruding electrode is insulated from the conductive structure via the spacer 209 (see Figure 2H). However, it is apparent from the teachings of Rajeevakumar that the

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alleged conducting structure 35 of Rajeevakumar connects with the gate poly 2 via the side and the top surface of the gate poly 2 (see Figure 1).

For at least these reasons, Applicant respectfully asserts that Rajeevakumar fails to teach or suggest the present invention or to render claims 13-17, 25-34, 36-43 anticipated. Since claims 14-17, 26-34, 37-43 are dependent claims, which further define the invention recited in claims 13, 25 and 36, respectively, Applicants respectfully assert that these claims also are in condition for allowance. Thus, reconsideration and withdrawal of this rejection are respectfully requested.

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CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth hereinbefore, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 13-17, 25-34, and 36-43 are in condition for allowance. Favorable consideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned.

Date: 8-3-2007

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